Apendix A
Calculation of Dose to Infant

Starting with PCB concentrations measured in breast milk, the average daily dose to infants for non-cancer effects was calculated as follows:

$$ADD_{nc\text{-}infant} = \frac{C_{milkfat} \times IR_{milk} \times f_3 \times f_4}{BW_i}$$

Where:

$ADD_{nc\text{-}infant}$ = Average daily dose for breast-feeding infant (mg/kg/day)
$C_{milkfat}$ = Concentration of PCBs measured in milk fat (µg/g-lipid)
IR_{milk} = Ingestion rate of breast milk (0.69 kg-milk/day)[1]
f_3 = Fraction of breast milk that is fat (0.04 kg-lipid/kg-milk)[1]
f_4 = Fraction of ingested PCB that is absorbed (0.9)[1]
BW_i = Body weight of breast-feeding infant (9.4 kg)[1]

[1] Assumptions and calculations are modified from Table C-3-2 of the U.S. Environmental Protection Agencies combustion guidance. (U. S. EPA. *Human Health Risk Assessment Protocol for Hazard Waste Combustion Facilities.* (EPA 530-R-05-006, September 2005.))